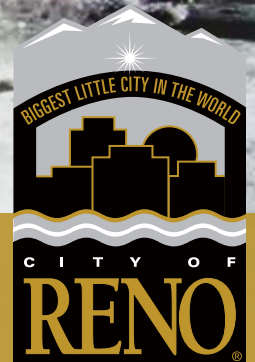




# SNOW AND ICE CONTROL PLAN

2014-2015



# **Winter Snow and Ice Control Plan**

## **2014 - 2015**

### **Purpose**

The purpose of this plan is to establish procedures for the City of Reno Public Works Department staff to efficiently conduct snow and ice control operations and as an information source for citizens of this community. This plan is designed to ensure that all work is completed in a well-planned, safe, efficient and environmentally sound manner with the available resources.

The goal of this planning effort is to ensure the City of Reno's residents will have safe and accessible priority streets throughout the snow and ice season. In addition, the Truckee Meadows is considered a non-attainment area for air quality. This annual plan is designed to comply with Washoe County Health Department air quality mandates.

The City of Reno Public Works Department staff strives to maintain safe winter driving conditions for the motoring public. Each winter storm has its own character with variable conditions such as wind, extreme temperatures, timing, duration of storm, rate of accumulation, and moisture content. This plan must remain flexible and take into consideration these variables.

### **Background**

The City of Reno receives an average of 13 storms annually and average snow accumulations totaling 23.5 inches. The City's annual snow removal budget and size of its snow removal equipment fleet are based on average snowfall figures as well as the expected number of street miles to be plowed and sanded during any given winter storm event. The snow and ice control program is not designed or intended to remove all accumulations of snow and ice from all streets (arterial, collector, and residential) within the City.

The City of Reno street system is divided into 19 prioritized snow and ice control routes totaling approximately 2,244 lane miles. Priority is given to arterial and collector streets along with school zones, hospitals, emergency facilities, bus routes, dangerous intersections, hills and curves. Secondary streets are given a low priority and generally receive a lower level of service or no service due to the limited availability of resources.

During a winter storm event where periods of heavy snowfall persist, the City may utilize the assistance of private contractors through the Associated General Contractors Auxiliary (AGC) for snow accumulations greater than 8 inches based on current and forecasted conditions for the region.

### **Planning and Scheduling of Resources**

During winter months from November through March of each year, the Street Maintenance and Operations Manager and Streets Crew Supervisors continuously monitor weather forecasts for approaching winter storms. Based on projected and current winter storm modeling and additional weather resource forecast information, staffing and equipment needs are determined and scheduled accordingly. Crews are scheduled to work alternating twelve-hour shifts during large winter storm events to provide 24/7 operational support for snow and ice control operations. During active winter storm snow and ice control operations, the Maintenance and Operations Division Manager and Street Maintenance and Operations Manager will monitor winter snow and ice removal activities, making operational adjustments and may request additional support as required to meet the needs of the City.

### **Major Storm Events**

During major storm events, staff will be scheduled to work alternating twelve-hour shifts. Each crew will consist of a Crew Supervisor and the required number of employees for that shift. Shift one (1) will be from 6:00 a.m. to 6:00 p.m. - Shift two (2) will be from 6:00 p.m. to 6:00 a.m. This rotation will continue until the required winter snow and ice control operations are completed.

When additional resources are required for snow accumulations of eight (8) inches or greater, the Street Maintenance and Operations Manager may request the assistance of private contractors through the Associated General Contractors (AGC) Auxiliary. Contractor resources will be directed to clear snow from priority one (1) streets and priority two (2) streets and other areas within the City that received greater amounts of accumulations (prior to clearing snow from residential streets) Streets will generally be cleared to one lane in and one lane out of each populated area.

### **Available Vehicles and Staff**

For the fiscal year 2014-2015 Public Works Maintenance and Operations will have a total of eighteen (18) trucks mounted with plows and sanders, one (1) wheel loader mounted with a push plow. This includes seventeen (17) ten wheel dump trucks, five (5) of which are all wheel drive, along with the front-end loader which will be assigned to the higher elevations and outlying routes. One (1) bobtail dump truck with sander will be assigned to the lower elevation routes. Street maintenance section has a total staff of fifty (50) snow plow operators that will be divided into two (2) crews. Sewer maintenance staff will provide additional support as needed. Additionally, a Fleet Mechanic will be scheduled to support winter snow and ice control operations as required.

### **De-icing Material/Salt and Sand - Satellite Stations**

The roadway abrasives currently being utilized to aid in traction and De-icing during the plowing stage of winter storm events is primarily a mixture of salt and sand (one part salt and five parts

sand). Maintenance and Operations currently utilizes a main storage area and three (3) satellite stations for the storage of de-icing materials. The main storage area is the City of Reno Corporation Yard located off of Commercial Row. Satellite station locations are, Northgate Golf Course, located off Avenida de Landa on Beaumont Parkway in northwest Reno, Moana Station, located on Moana Lane and Baker in southwest Reno and Stead Sewer Plant located off Military Road. Front-end loaders will be located at each of the satellite locations for the loading of de-icing materials.

### **Anti-Icing/ Salt Brine Application**

Public Works Maintenance and Operations utilizes a Salt Brine anti-icing application process to assist in control of icing on targeted roads, priority one (1) streets, bridges and some inclines. Advantage is gained using salt brine as a prevention method by reducing operational cost of snow removal operations, reduction of salt, abrasives and retrieval of abrasives.

Applying salt brine is an effective pre-treatment of roadways before inclement weather arrives. Salt brine will adhere to the road surface and can be applied several days prior a predicted winter storm event. For anti-icing to be most effective the importance of timing for placement is essential. Applying salt brine to the roadway surface prior to a precipitation event will assist in keeping the snow and ice from bonding to the surface of the roadway, making it easier for removal and a more cost effective snow removal operation.

Salt in its granular form works by creating a brine solution by absorbing moisture from the snow before its effectiveness is realized. Salt brine reduces the reaction time because it's already in liquid form, and is more evenly distributed. Salt brine can also have some residual effect of providing ongoing anti-icing value by remaining on the pavement for several days.

### **Sanding and Plowing Procedures**

Individual operators will apply de-icing materials in assigned routes as needed based on the current conditions in each respective route.

Operators are instructed to plow only when the accumulated snow depth reaches approximately four (4) or more inches. All plowing will be from the inside lane to the curbside/shoulder.

All streets will be plowed and/or sanded in the priority order as identified in each of the 19 routes contained within this plan. Operators will complete all streets in said priority order unless otherwise directed.

Upon completion of the priority one (1) streets, operators will plow the priority two (2) streets. When all priority two (2) streets are cleared with one lane in and one lane out, the operators will return and clear the remainder of the priority two (2) streets.

Snow and ice control operations will continue until the storm event has ended and all first and second priority streets have been plowed.

### **Post Storm Material Recovery Operation**

Current Washoe County Health Department air quality regulations require the City to remove all residual salt/sand abrasives from its roadways within four (4) days after a storm event.

To comply with this mandate, Maintenance and Operations schedules street sweepers to remove all residual salt/sand abrasives as expeditiously and safely as weather and road conditions permit. This activity is considered to be part of the snow and ice control operations.

### **Post Storm Procedures**

At the completion of the storm event, operators will wash, grease and perform regular maintenance on all snow and ice control equipment. Operators will immediately notify their Supervisor and coordinate with Fleet Management for repairs and maintenance issues.

# **INTERLOCAL AGREEMENT**

# **INTERLOCAL AGREEMENT FOR EMERGENCY SNOW REMOVAL PLAN**

## **I PARTIES**

The Parties to this mutual assistance plan are the City of Reno, City of Sparks, and Washoe County (Parties).

## **II DEFINITIONS**

**Snow Emergency**-means weather conditions which severely impede vehicular traffic in the Truckee Meadows and require the pooling of resources by the Parties in order to ensure the continuation of emergency and public safety agency operations on designated snow routes.

**Snow Routes**-include those streets depicted on Exhibit “A”, which major routes carry heavy traffic volumes, provide primary access, or are otherwise essential for rapid movement, and response to the community by emergency vehicles.

**Snow Emergency Commanders**-implement, manage and supervise all snow removal activities as set forth herein. Snow Emergency Commanders (or their successors) are hereby designated as follows:

|                |                                                                |
|----------------|----------------------------------------------------------------|
| City of Reno   | Marnell Heinz – Streets Maintenance and Operations Manager     |
| City of Sparks | Danny Hamlin – Maintenance Services Manager                    |
| Washoe County  | Adam Searcy – Superintendent of Road Operation and Maintenance |

## **III SNOW EMERGENCY RESPONSIBILITIES**

### **Snow Emergency Commanders:**

- Coordinate with counterparts to determine the status of the situation throughout the Truckee Meadows area.
- Activate and implement the plan, following a consensus determination that a snow emergency exists.
- Advise own organization’s chain of command, including emergency management personnel.
- Decide when the snow emergency has abated, and cancel the plan, following a consensus determination.

### **City/County Management and Emergency Management Personnel:**

- Monitor overall impacts of weather event and progress of emergency snow removal.
- Provide public information, news releases.
- Advise elected officials of emergency snow removal plan activation.
- If applicable, declare an emergency within their jurisdiction, including restrictions on snow emergency routes which may be invoked; advise State of formal declaration; activate emergency operations center (EOC’s).

#### **IV CONDITIONS OF AGREEMENT**

**The Parties to this Interlocal agreement do hereby agree as follows:**

**1. Conditions for Implementation of Emergency Snow Removal Plan**

A snow emergency will be declared under the following conditions:

- Whenever a majority of the Snow Emergency Commanders find, on the basis of falling snow, sleet or freezing rain, that weather conditions could severely impede vehicular traffic on designated snow routes (see Section II, Definitions), thus threatening the continuation of emergency and public agency operations.

**2. Declaration Process**

- a. Snow Emergency Commanders will recommend implementation of Emergency Snow Removal (ESR) plan to City/County Management, according to established emergency management procedures, based on a consensus agreement that a snow emergency exists.
- b. City/County Managers will contact each other regarding implementation and any fine tuning necessary to meet needs of event.
- c. City/County will handle announcement according to individual Emergency Plans.

**3. Snow Emergency Routes/Procedures**

Exhibit “A” depicts designated snow emergency routes under this plan and assigns responsibilities for snow clearing within the indicated areas. These snow emergency routes will be those first plowed and kept open by the entity to which responsibility has been assigned.

Upon completion of each area, meaning that the designated routes are open and passable by emergency vehicles, the responsible entity may reassign its resources to other areas of responsibility (either another area designated by Exhibit “A” or to streets maintained by the entity which are not so designated). Each entity will be responsible for keeping the routes assigned by Exhibit “A” open until the snow emergency is canceled.

The decision to hire private forces to assist with snow removal in any area of this plan will be made by, authorized by, and chargeable to the Party within whose jurisdiction the area is located.



#### **4. Second Phase of Assistance**

If an agency (or agencies) continue to have streets which are impassable to emergency vehicles while other agencies have completed snow removal operations, a second phase of assistance may be granted under this Agreement in accordance with the following:

Additional assistance for streets not shown on Exhibit "A" of this Agreement may be granted if all three snow commanders determine this action is needed due to extraordinary weather conditions to provide emergency vehicle access. Additional assistance may be requested only when an agency's (or agencies') resources are totally committed to emergency access snow removal operations and when additional resources are needed to improve emergency access. Agencies providing support shall have completed operations in accordance with their snow removal plan and will then make available additional resources to improve emergency access within the requesting agency.

#### **5. Emergency Operations Center (EOC)**

The ESR Plan does not automatically call for operation an EOC. The Parties may operate out of one Emergency Operations Center if City/County Management agrees that such an arrangement would facilitate implementation of the ESR Plan. If the Parties decide to operate out of one EOC, each Party will have a representative at the Center at all times.

#### **6. Signing of Snow Emergency Routes; Enforcement of Operations Restrictions**

Signing of snow emergency routes and the enforcement of operations restrictions and/or controls, if any, is the responsibility of the jurisdiction in which each route is located. Each jurisdiction will immediately cause to be cleared, as practicable, any vehicle parked or disabled in a position obstructing a travel lane, or otherwise impeding the safe and expeditious clearing of snow on designated routes.

#### **7. Termination-Emergency Snow Removal Operations**

This plan shall remain in effect until canceled, by mutual agreement of the Snow Emergency Commanders, who shall subsequently notify City/Council Management that emergency snow removal operations are complete. City/Council Management will make corresponding public announcements according to their emergency plans, or other protocols.

## **8. Liability**

Each Party shall be held harmless by other Parties, from all claims, liabilities and demands, other than those arising from willful negligence, which may arise from emergency snow removal operations performed within another Party's jurisdiction.

## **9. Post-Incident Report**

Each Party shall keep track of costs associated with this ESR Plan's implementation, including personnel, fuel, equipment maintenance and contracting expenses, for inclusion in a Post-Incident Report.

## **10. Reimbursement**

No Party shall be obligated to reimburse any other Party on account of any action taken or aid rendered under this Agreement, or for any use of material or damage to equipment incurred in the course of rendering emergency assistance as provided under this Agreement.

## **11. Annual Review**

The Parties will review this Agreement annually to determine any needed changes or modifications to both the procedures outlined under this Agreement and to Exhibit "A", the map depicting designated snow routes.

## **12. Term of Agreement**

This Agreement shall be effective upon passage and approval by the Washoe Board of County Commissioners and the Reno and Sparks City Councils. Any Party may withdraw from this Agreement by giving a thirty (30) day notice in writing to the other Parties.

IN WITNESS THEREOF, the Parties hereto have executed this agreement as of the day and year appearing by the signatures below:

**CITY OF RENO,**

By and through its City Council

By: \_\_\_\_\_  
Mayor, City of Reno

Date: \_\_\_\_\_

Attest: \_\_\_\_\_  
Reno City Clerk

Date: \_\_\_\_\_

By: \_\_\_\_\_  
Mayor, City of Sparks

Date: \_\_\_\_\_

Attest: \_\_\_\_\_  
Sparks City Clerk

Date: \_\_\_\_\_

**COUNTY OF WASHOE,**

By and through is Board of County Commissioners

By: \_\_\_\_\_  
Chairperson, Washoe County  
Board of Commissioners

Date: \_\_\_\_\_

Attest: \_\_\_\_\_

Date: \_\_\_\_\_

Approved as to proper form and compatibility with the laws of the State of Nevada  
pursuant to NRS 277.140.

**ATTORNEY GENERAL OF THE STATE OF NEVADA**

By: \_\_\_\_\_

Date: \_\_\_\_\_

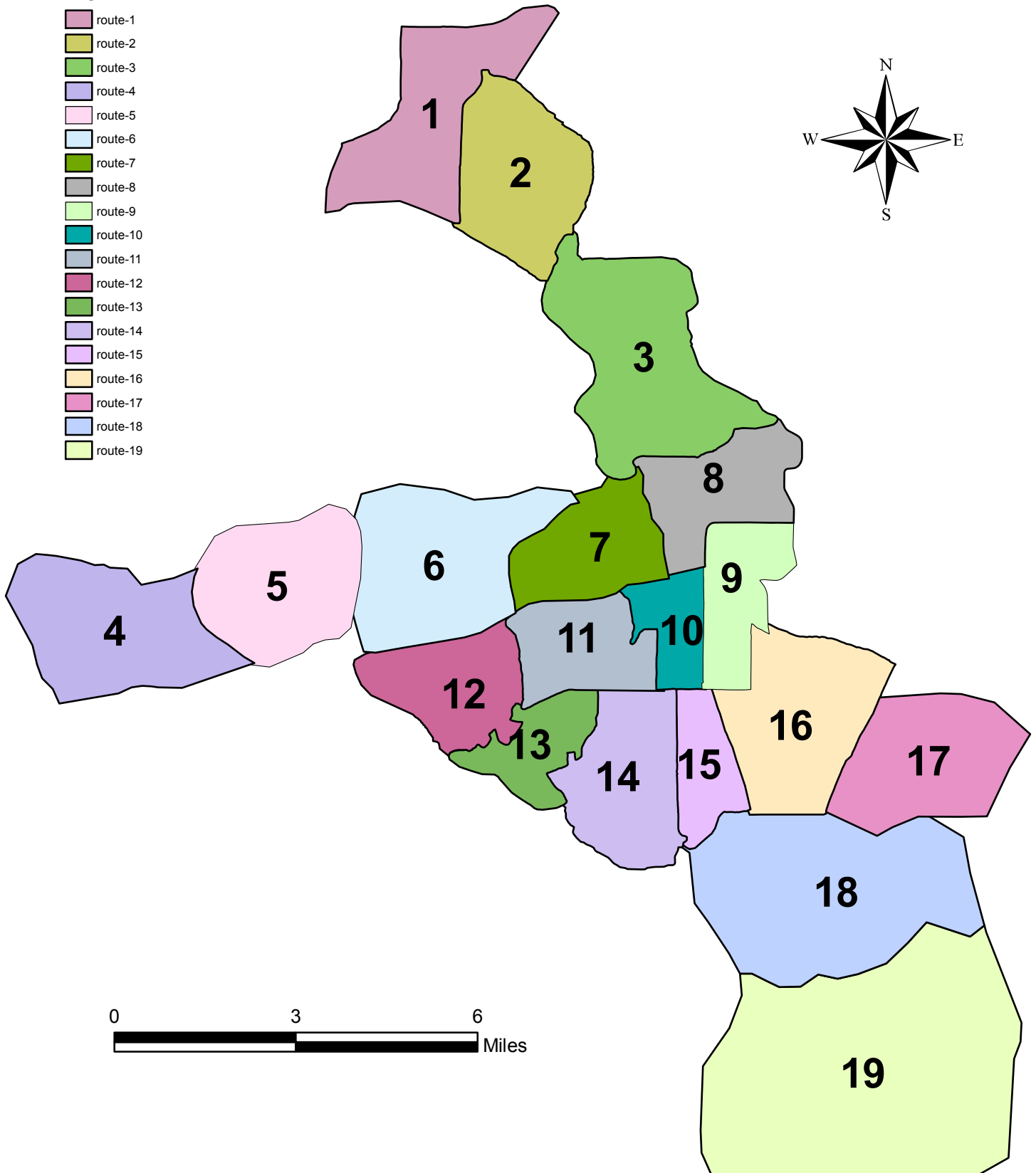
## 2014-15      Snow Equipment List

| <b>10 yd</b> | <b>5 yd</b> | <b>Loaders</b> |
|--------------|-------------|----------------|
| 270606       | 966701      | 271602         |
| 270607       |             | 261604         |
| 260603       |             | 261605         |
| 260604       |             | 241601         |
| 260605       |             |                |
| 240601       |             |                |
| 240602       |             |                |
| 240603       |             |                |
| 240604       |             |                |
| 220603       |             |                |
| 220604       |             |                |
| 220605       |             |                |
| 220606       |             |                |
| 220607       |             |                |
| 148001       |             |                |
| 148002       |             |                |
| 148003       |             |                |

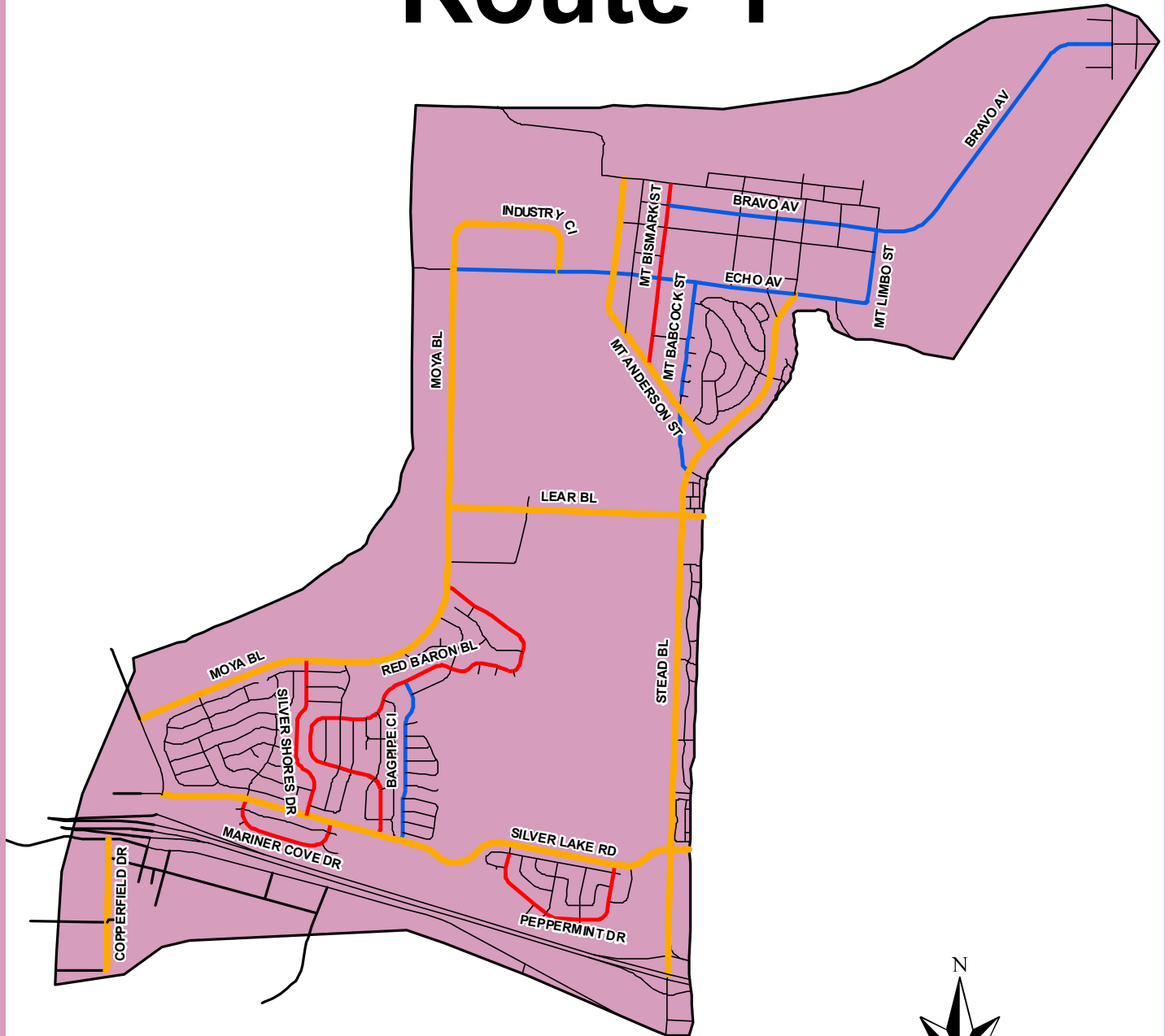
# All Routes

## Legend

-  route-1
-  route-2
-  route-3
-  route-4
-  route-5
-  route-6
-  route-7
-  route-8
-  route-9
-  route-10
-  route-11
-  route-12
-  route-13
-  route-14
-  route-15
-  route-16
-  route-17
-  route-18
-  route-19







# Route 1



## Legend





### Route 1 Streets

#### PRIORITY

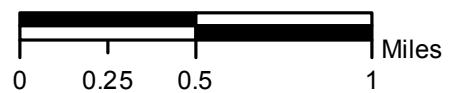
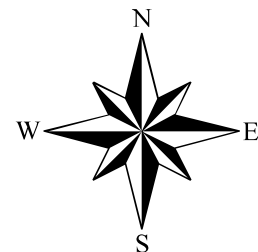
-  Priority 1 Multiple Lanes = Orange
-  Priority 1 Single Lane = Blue
-  Priority 2 Bus Routes = Red
-  Priority 3 = Black

#### Mileage

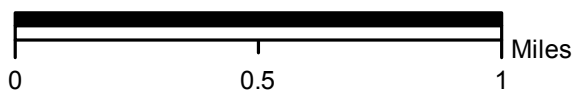
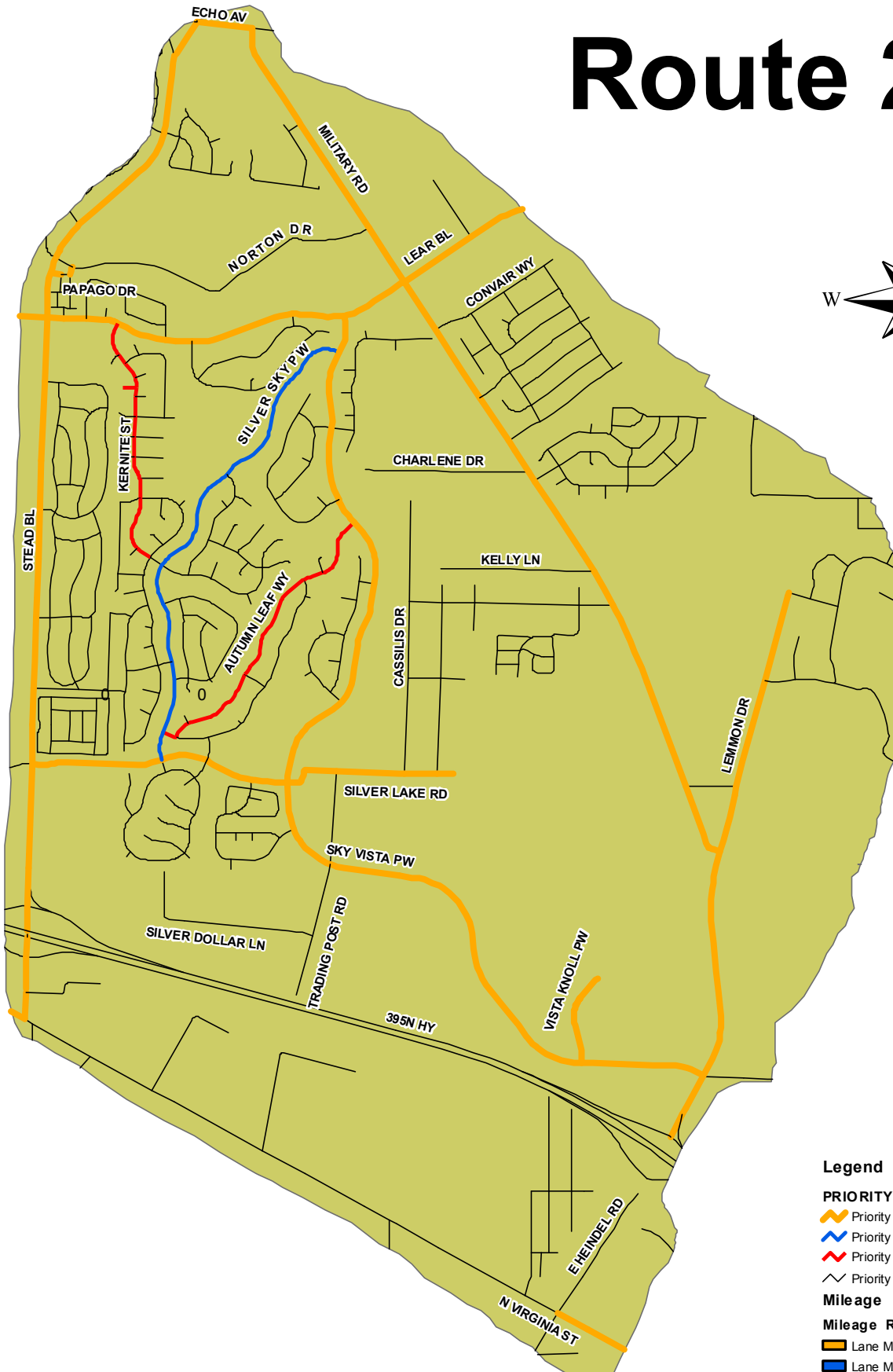
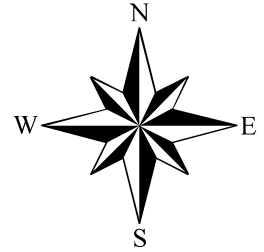
##### Mileage Route 1

|                                                                                     |            |       |
|-------------------------------------------------------------------------------------|------------|-------|
|  | Lane Miles | 28.00 |
|  | Lane Miles | 14.43 |
|  | Lane Miles | 12.8  |
|  | Total      | 55.23 |

All priority 1 streets get brine when conditions permit.



# Route 2



## Legend

### PRIORITY

- Priority 1 Multiple Lanes = Orange
- Priority 1 Single Lane = Blue
- Priority 2 Bus Routes = Red
- Priority 3 = Black

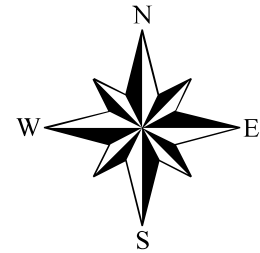
### Mileage

#### Mileage Route 2

|  |            |       |
|--|------------|-------|
|  | Lane Miles | 62.28 |
|  | Lane Miles | 6.8   |
|  | Lane Miles | 4.4   |
|  | Total      | 73.48 |

All priority 1 streets get brine when conditions permit.

# Route 3



## Legend

### Route 3 Streets

#### PRIORITY

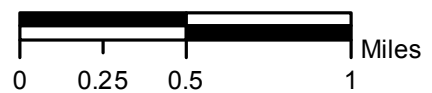
- Priority 1 Multiple Lanes = Orange
- Priority 1 Single Lane = Blue
- Priority 2 Bus Routes = Red
- Priority 3 = Black

#### Milage

##### Milage Route 3

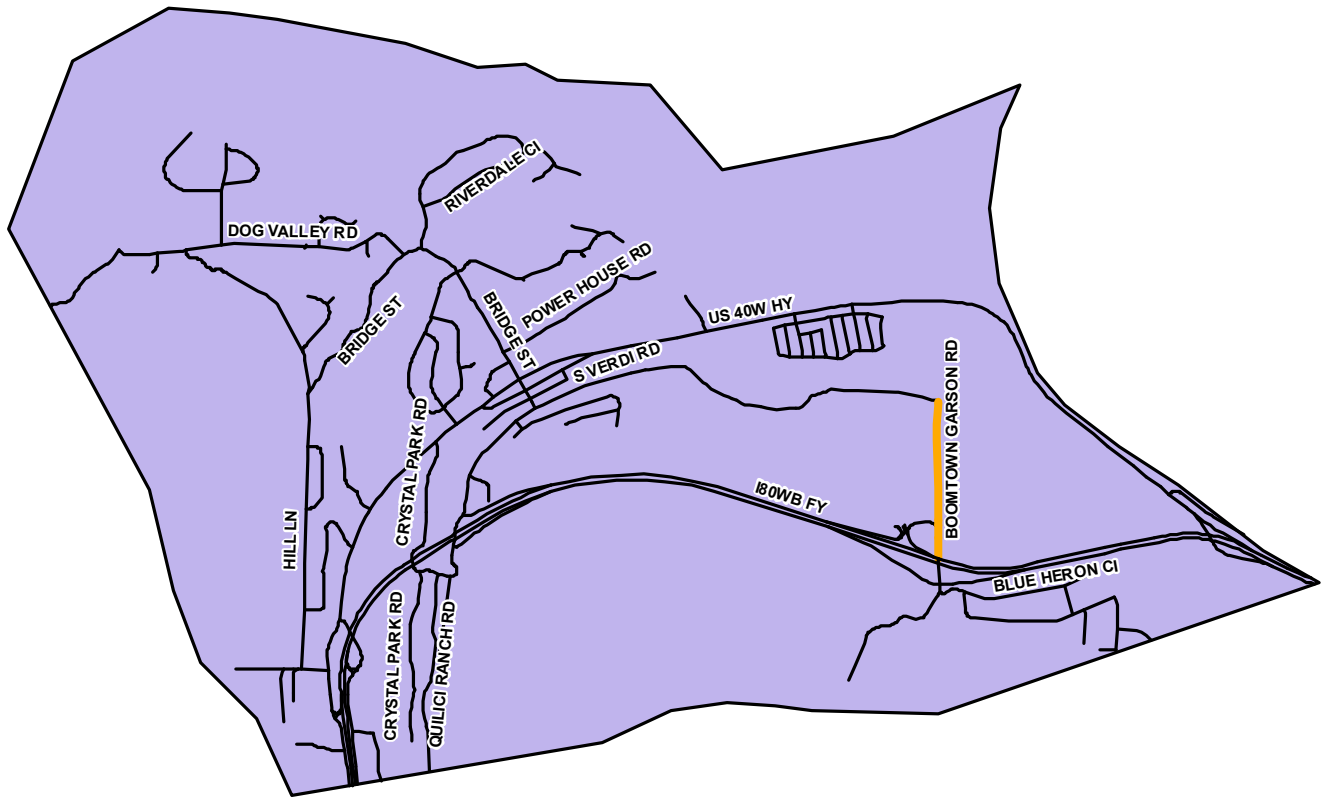
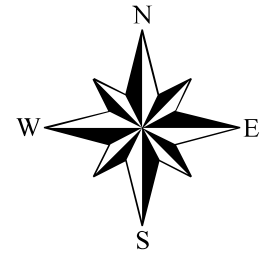
|                                                  |       |
|--------------------------------------------------|-------|
| <span style="color: orange;">—</span> Lane Miles | 31.03 |
| <span style="color: blue;">—</span> Lane Miles   | 7.8   |
| <span style="color: red;">—</span> Lane Miles    | 10.85 |
| <span style="color: green;">—</span> Total       | 49.68 |

All priority 1 streets get brine when conditions permit.





# Route 4



## Legend

### Route 4 Streets

#### PRIORITY

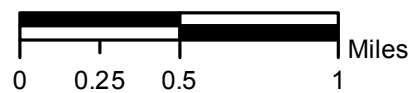
- Priority 1 Multiple Lanes = Orange
- Priority 1 Single Lane = Blue
- Priority 2 Bus Routes = Red
- Priority 3 = Black

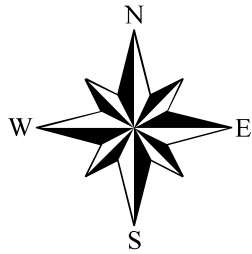
#### Mileage

##### Mileage Route 4

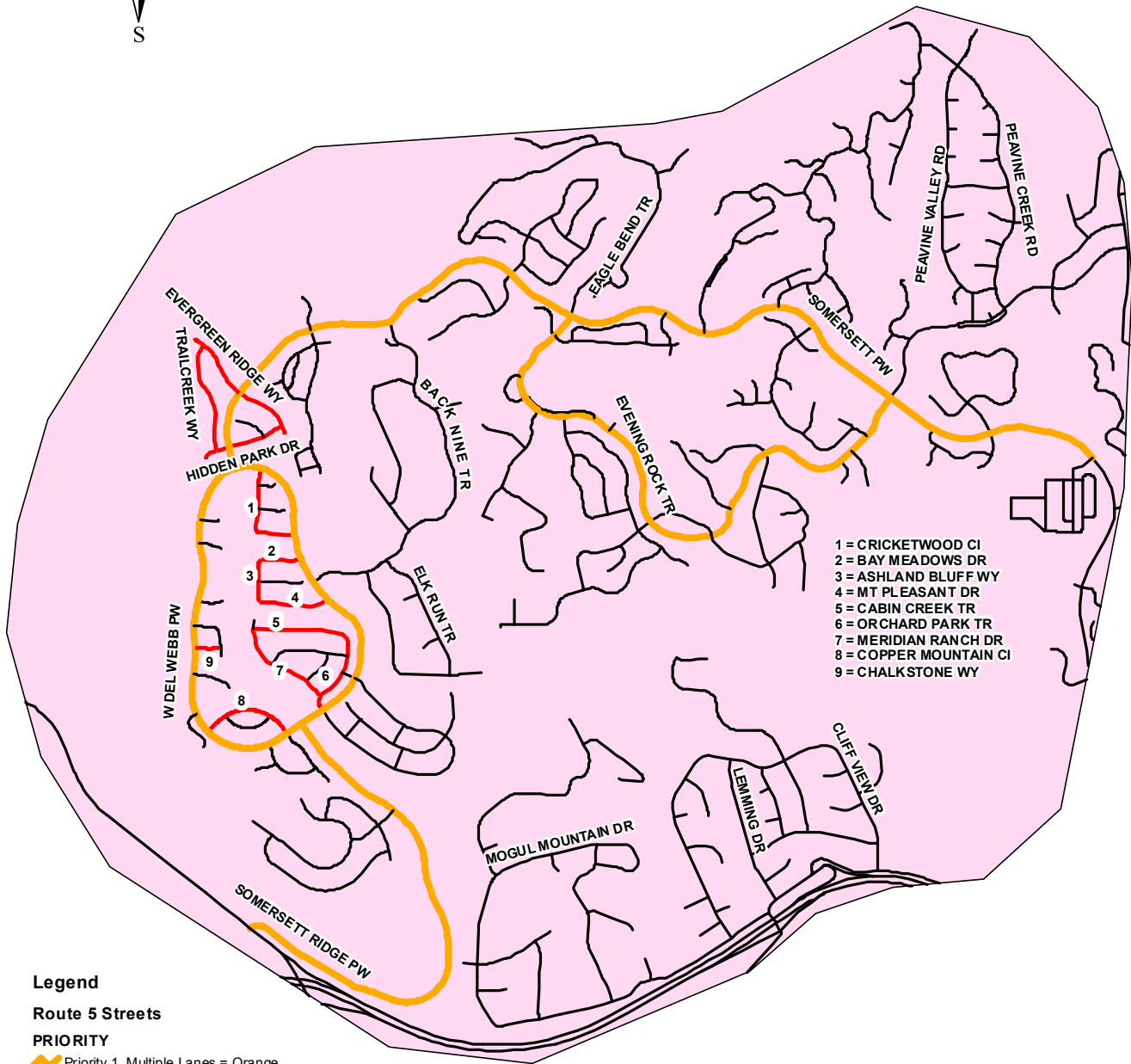
|  |            |     |
|--|------------|-----|
|  | Lane Miles | 2.1 |
|  | Lane Miles | 0   |
|  | Lane Miles | 0   |
|  | Total      | 2.1 |

All priority 1 streets get brine when conditions permit.





# Route 5



## Legend

### Route 5 Streets

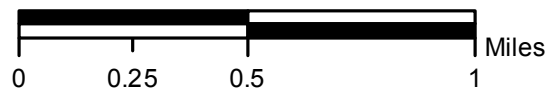
#### PRIORITY

- Priority 1 Multiple Lanes = Orange
- Priority 1 Single Lane = Blue
- Priority 2 Bus Routes = Red
- Priority 3 = Black

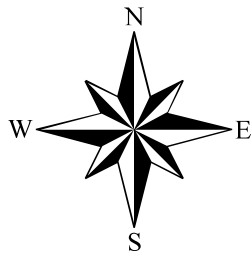
#### Mileage

##### Mileage Route 5

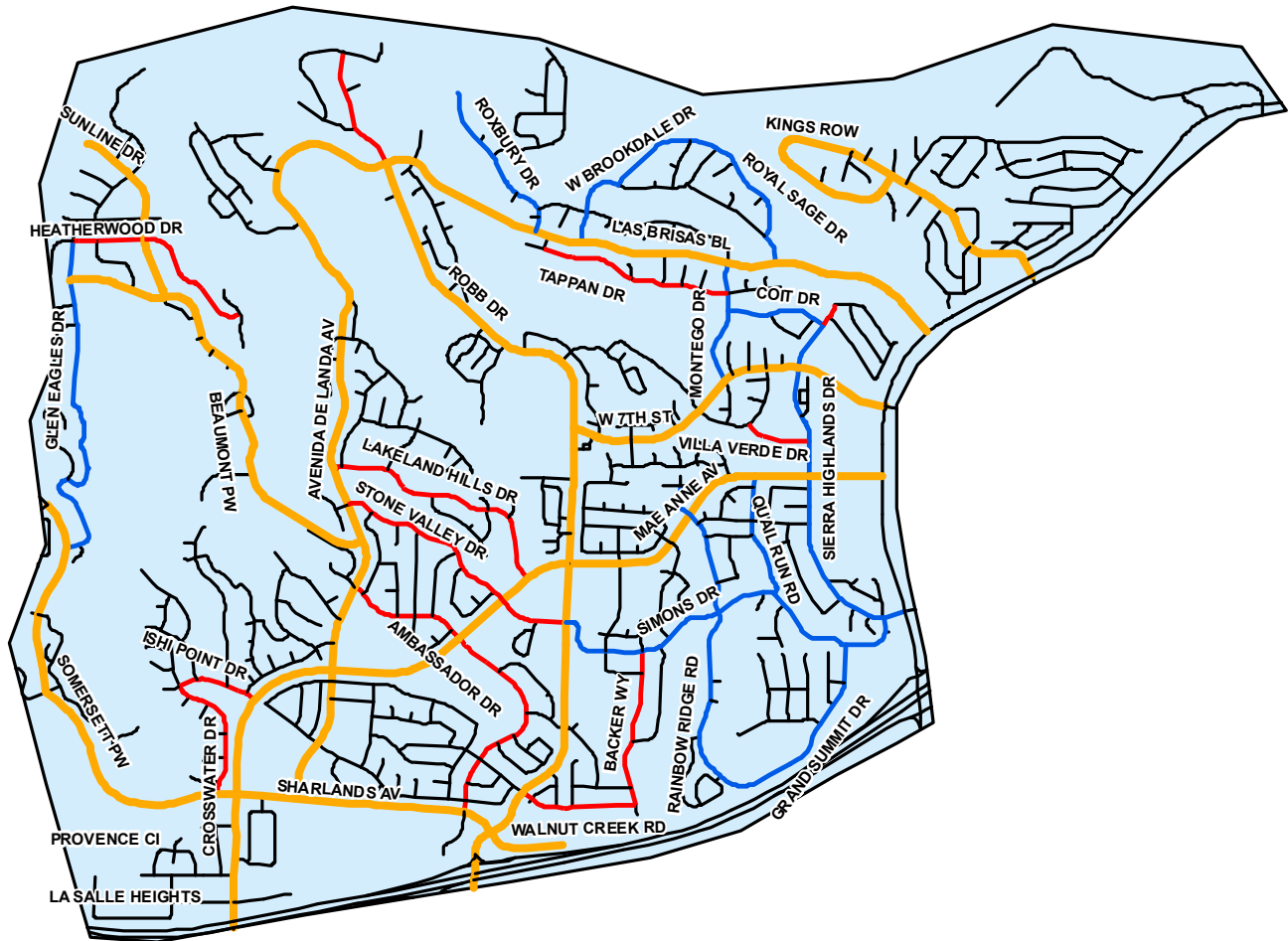
|            |       |
|------------|-------|
| Lane Miles | 21.54 |
| Lane Miles | 0     |
| Lane Miles | 5.00  |
| Total      | 26.54 |



All priority 1 streets get brine when conditions permit.



# Route 6



## Legend

### Route 6 Streets

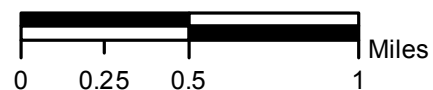
#### PRIORITY

- Priority 1 Multiple Lanes = Orange
- Priority 1 Single Lane = Blue
- Priority 2 Bus Routes = Red
- Priority 3 = Black

#### Milage

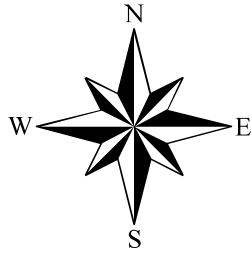
##### Milage Route 6

|  |            |        |
|--|------------|--------|
|  | Lane Miles | 68.5   |
|  | Lane Miles | 22.5   |
|  | Lane Miles | 19.91  |
|  | Total      | 110.91 |



All priority 1 streets get brine when conditions permit.

# Route 7



## Legend

### Route 7 Streets

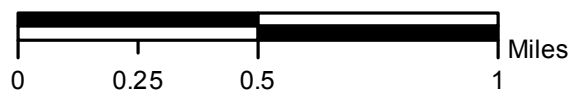
#### PRIORITY

- Priority 1 Multiple Lanes = Orange
- Priority 1 Single Lane = Blue
- Priority 2 Bus Routes = Red
- Priority 3 = Black

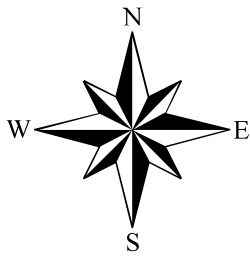
#### Milage

##### Milage Route 7

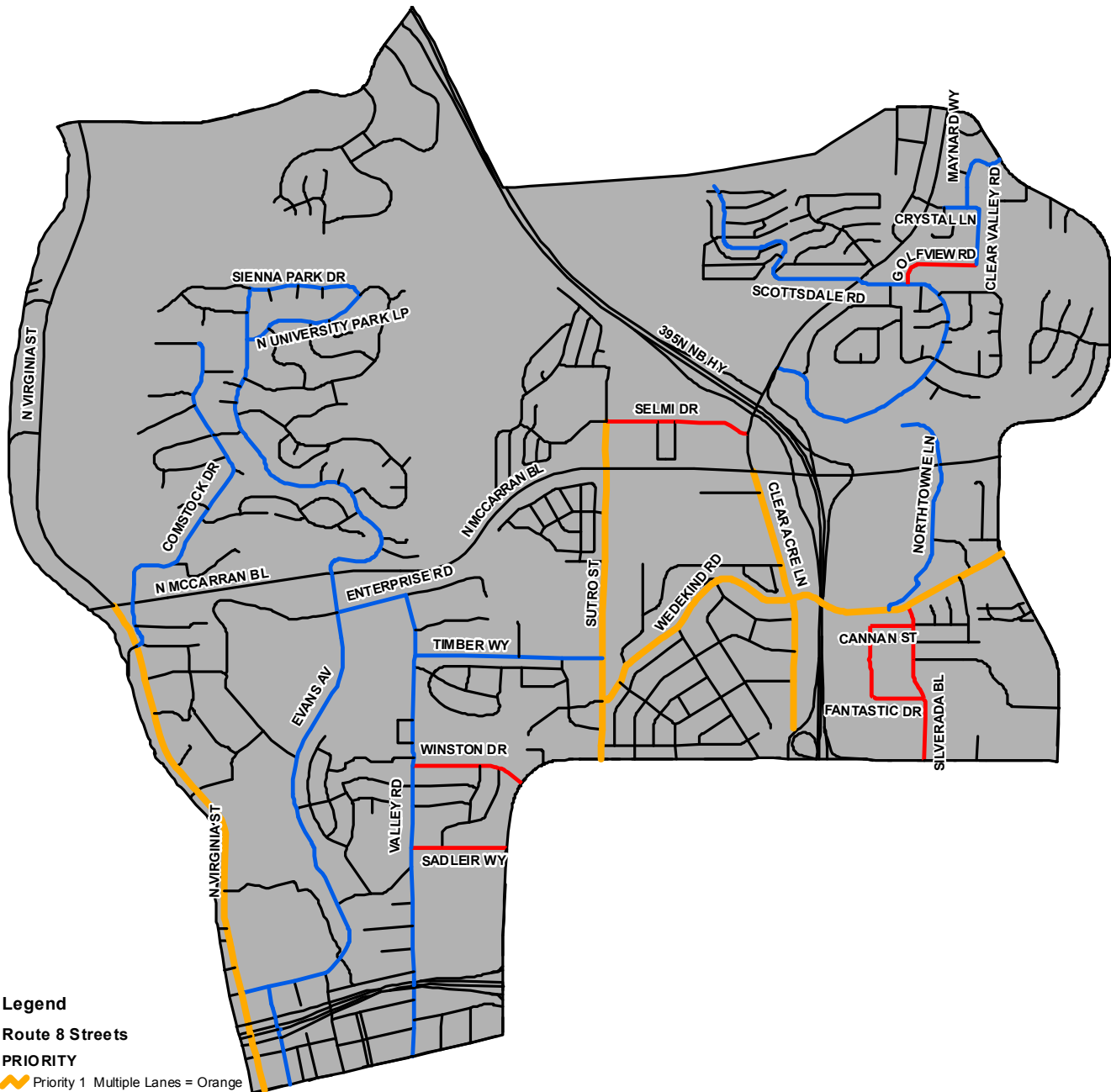
|  |            |       |
|--|------------|-------|
|  | Lane Miles | 28.17 |
|  | Lane Miles | 6.68  |
|  | Lane Miles | 13.07 |
|  | Total      | 47.92 |



All priority 1 streets get brine when conditions permit.



# Route 8



## Legend

### Route 8 Streets

#### PRIORITY

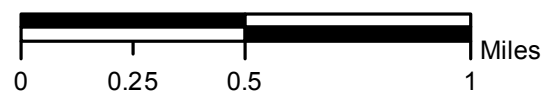
- Priority 1 Multiple Lanes = Orange
- Priority 1 Single Lane = Blue
- Priority 2 Bus Routes = Red
- Priority 3 = Black

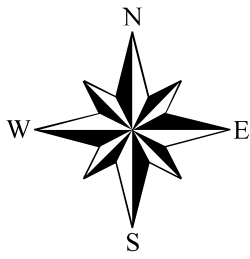
#### Milage

##### Milage Route 8

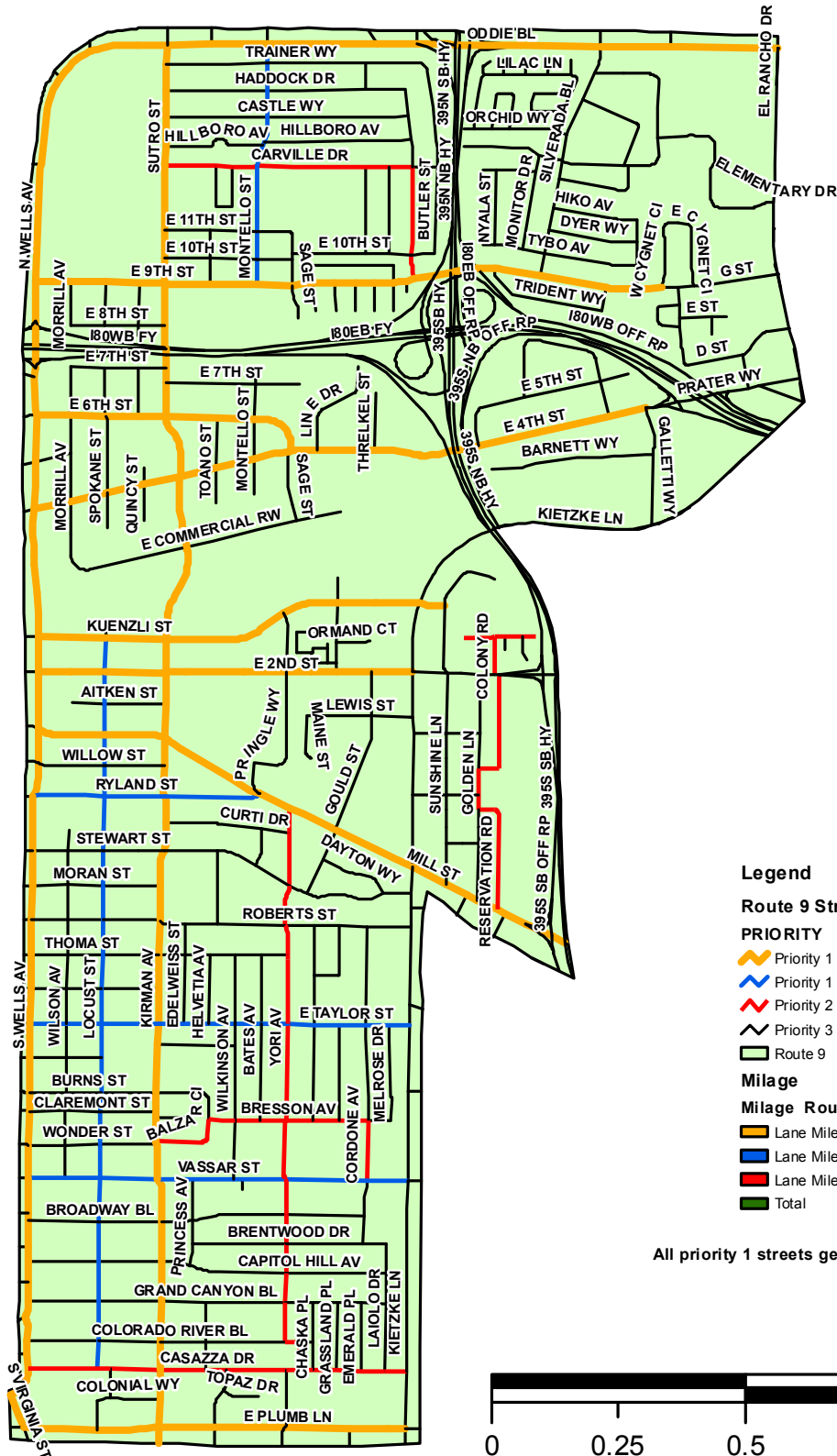
- Lane Miles 17.1
- Lane Miles 19.8
- Lane Miles 6.8
- Total 50.9

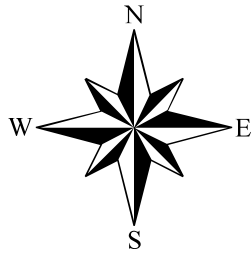
All priority 1 streets get brine when conditions permit.



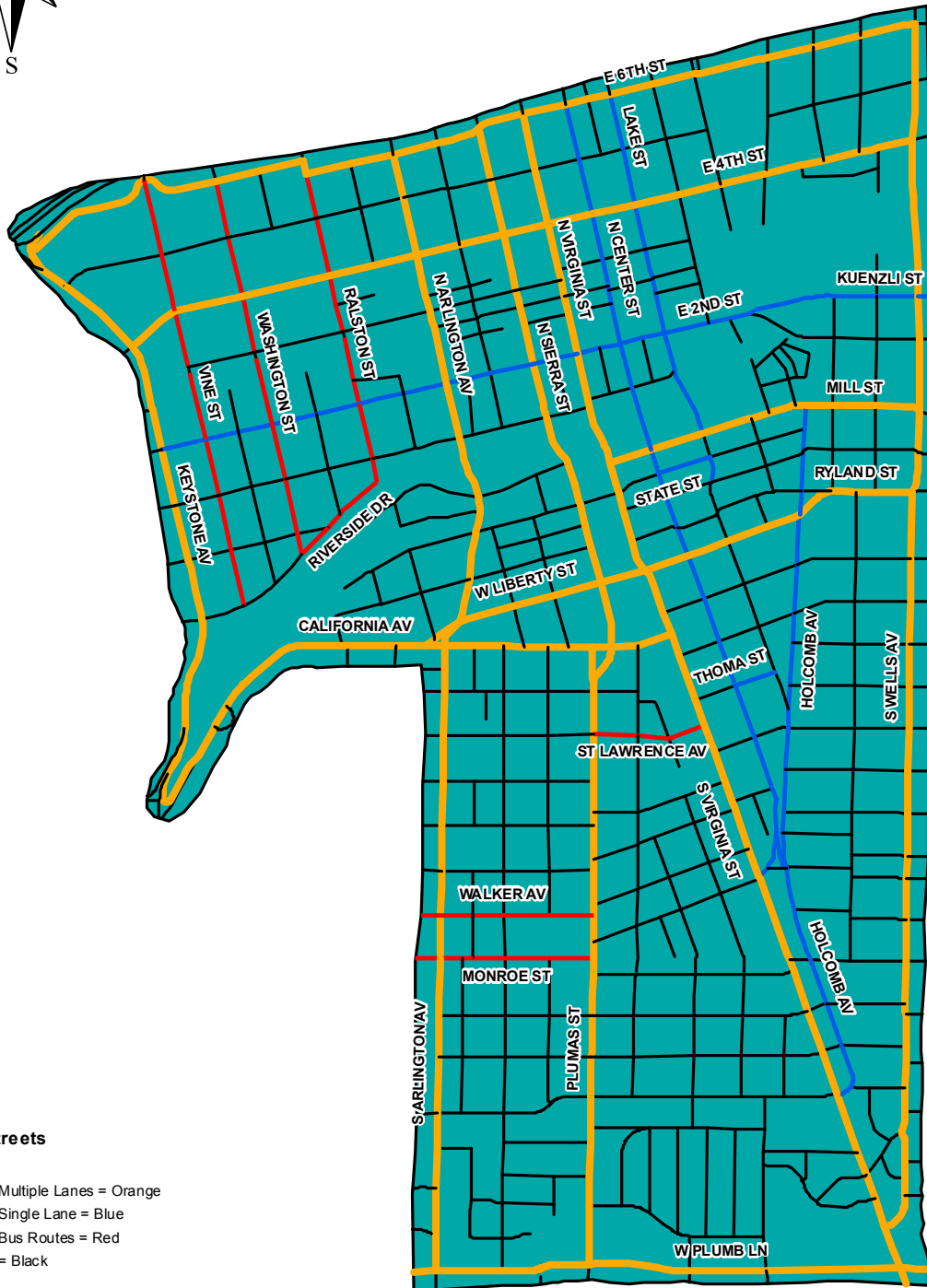


# Route 9





# Route 10



## Legend

### Route 10 Streets

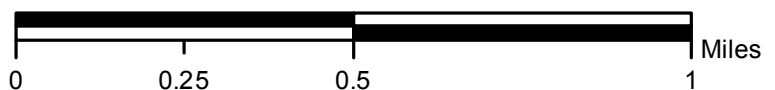
#### PRIORITY

- Priority 1 Multiple Lanes = Orange
- Priority 1 Single Lane = Blue
- Priority 2 Bus Routes = Red
- Priority 3 = Black
- Route 10

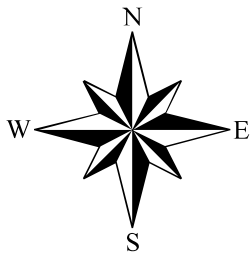
#### Milage

##### Milage Route 10

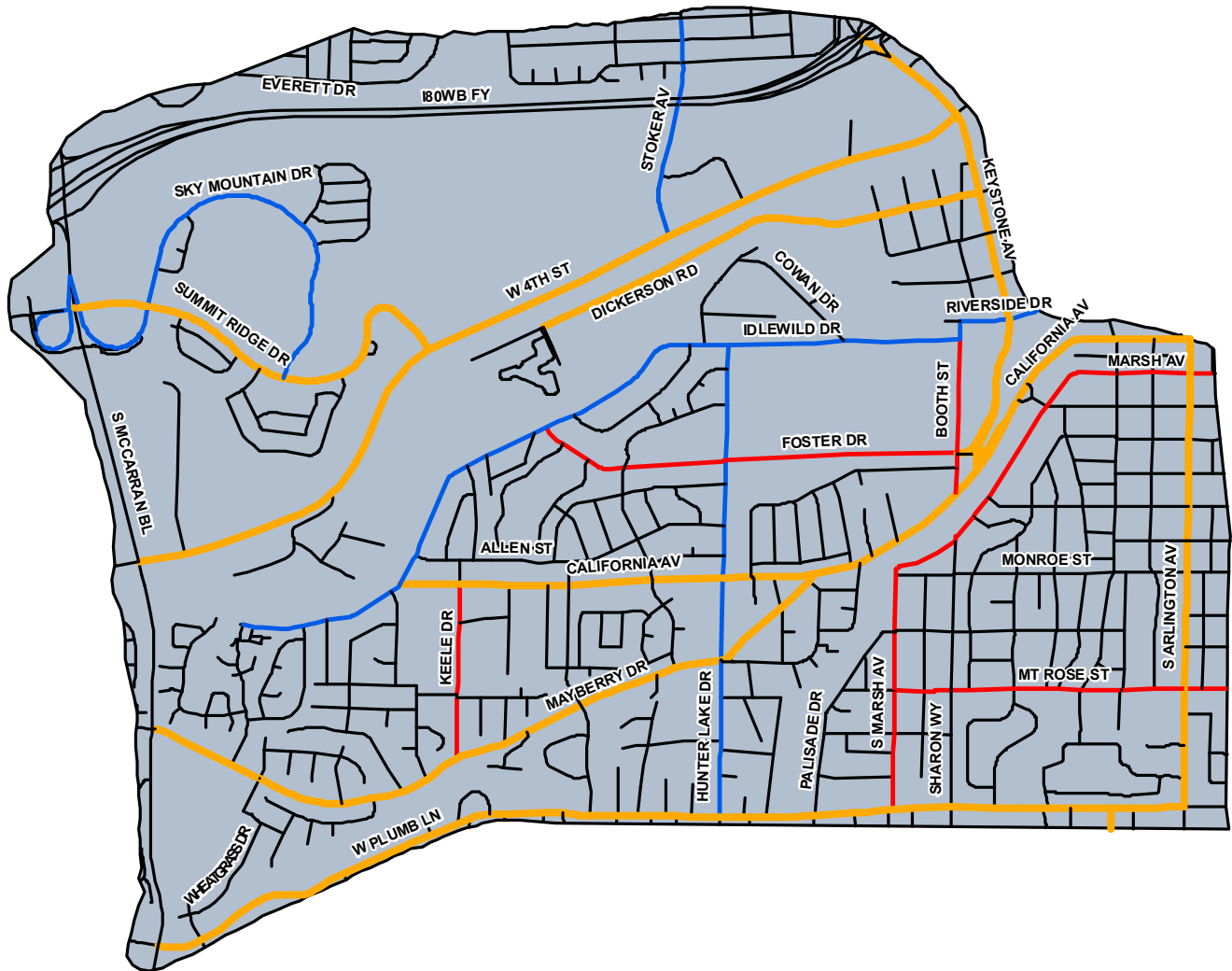
|  |            |       |
|--|------------|-------|
|  | Lane Miles | 68.88 |
|  | Lane Miles | 17.18 |
|  | Lane Miles | 7.92  |
|  | Total      | 93.98 |



All priority 1 streets get brine when conditions permit.



# Route 11



## Legend

### Route 11 Streets

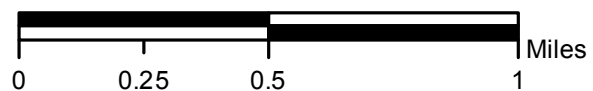
#### PRIORITY

- Priority 1 Multiple Lanes = Orange
- Priority 1 Single Lane = Blue
- Priority 2 Bus Routes = Red
- Priority 3 = Black
- Route 11

#### Milage

##### Milage Route 11

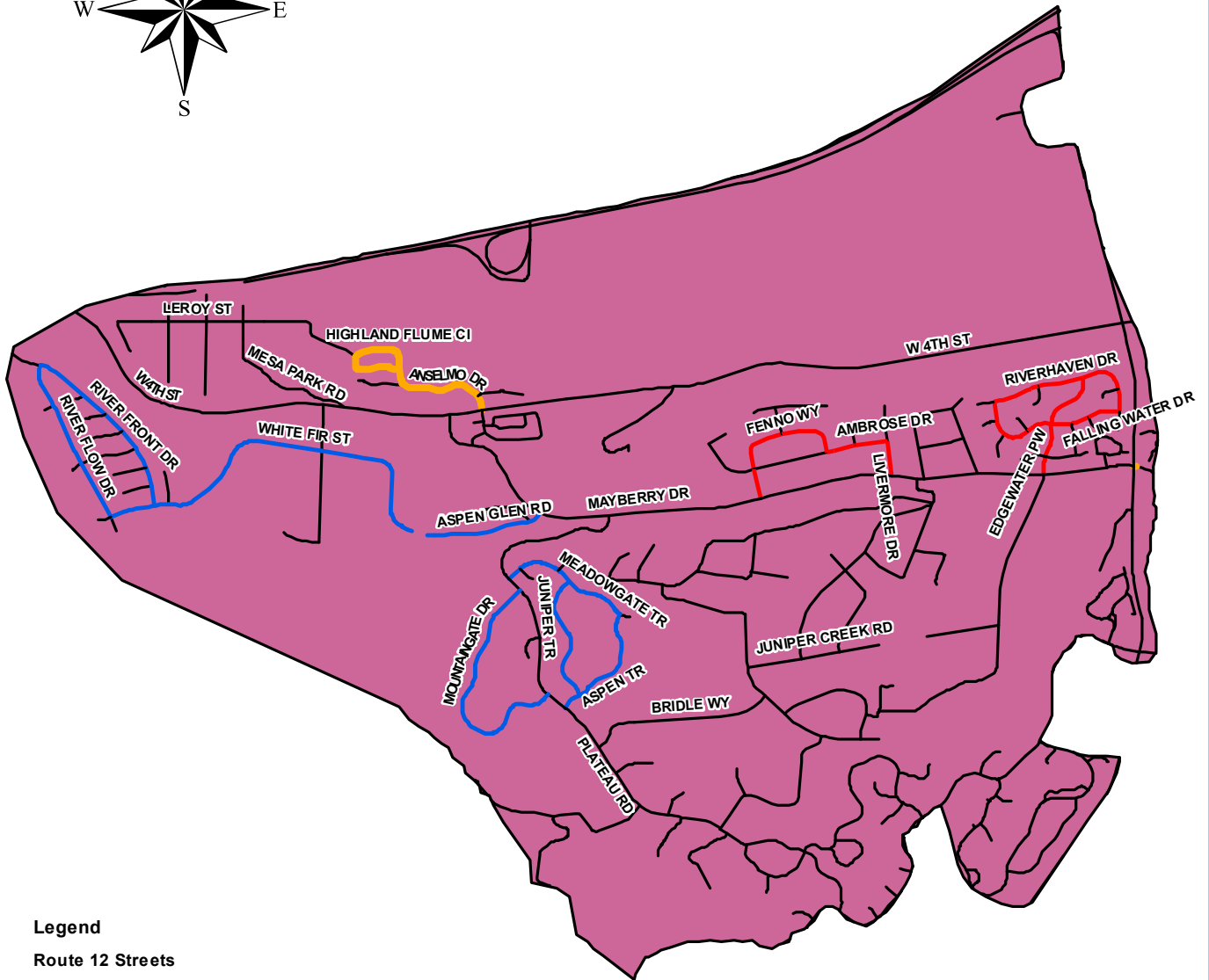
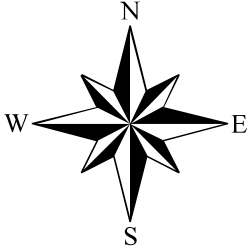
|            |       |
|------------|-------|
| Lane Miles | 57.34 |
| Lane Miles | 16.0  |
| Lane Miles | 10.8  |
| Total      | 84.14 |



All priority 1 streets get brine when conditions permit.



# Route 12



## Legend

### Route 12 Streets

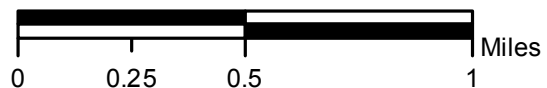
#### PRIORITY

- Priority 1 Multiple Lanes = Orange
- Priority 1 Single Lane = Blue
- Priority 2 Bus Routes = Red
- Priority 3 = Black
- Route 12

#### Milage

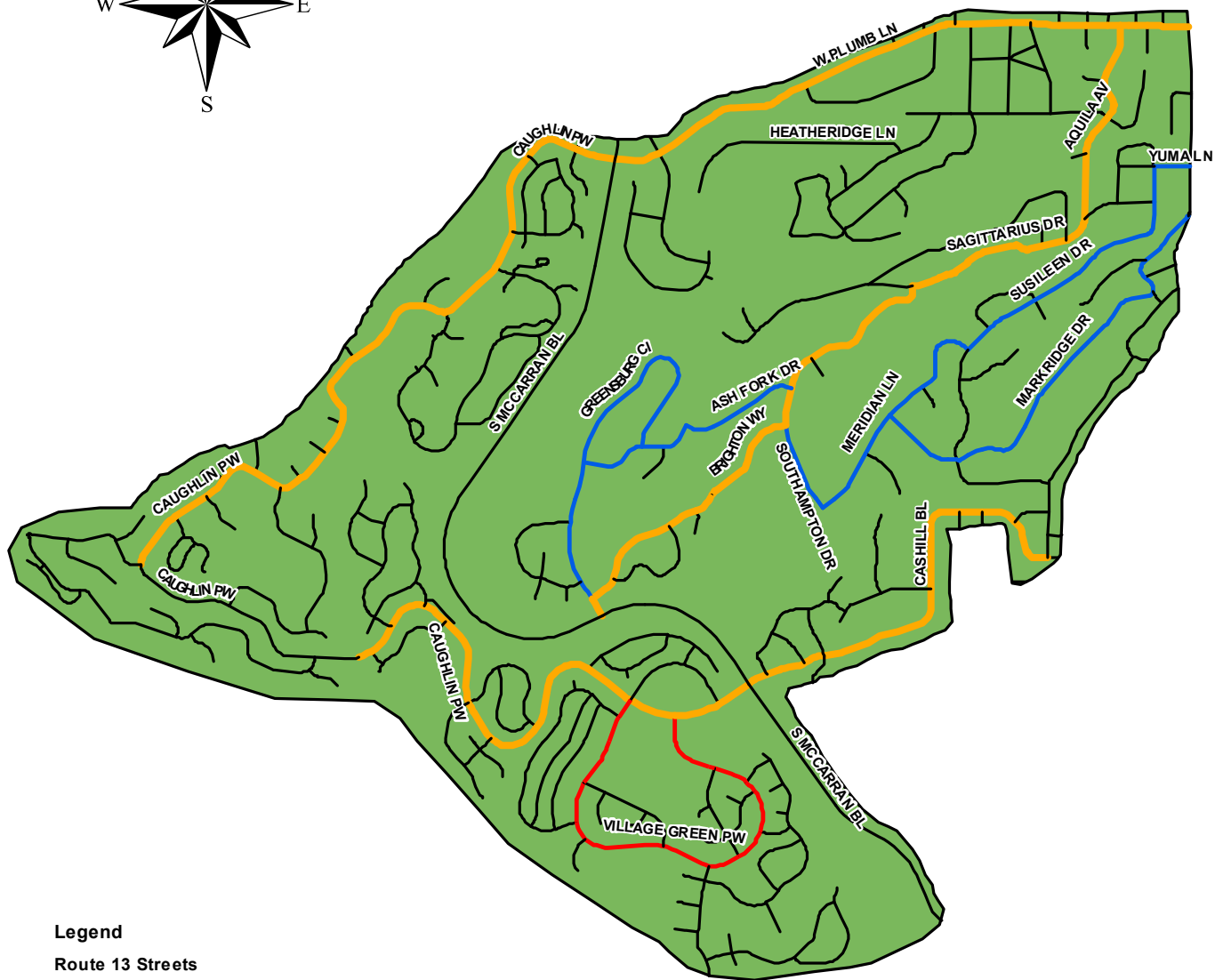
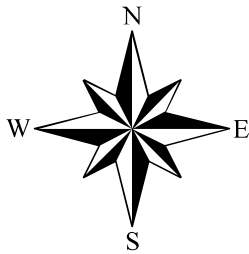
##### Milage Route 12

|            |       |
|------------|-------|
| Lane Miles | 2.82  |
| Lane Miles | 11.84 |
| Lane Miles | 3.46  |
| Total      | 18.12 |



All priority 1 streets get brine when conditions permit.

# Route 13



## Legend

### Route 13 Streets

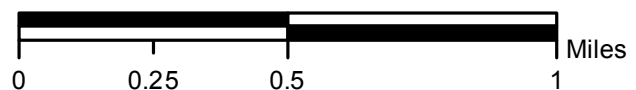
#### PRIORITY

- Priority 1 Multiple Lanes = Orange
- Priority 1 Single Lane = Blue
- Priority 2 Bus Routes = Red
- Priority 3 = Black
- Route 13

#### Milage

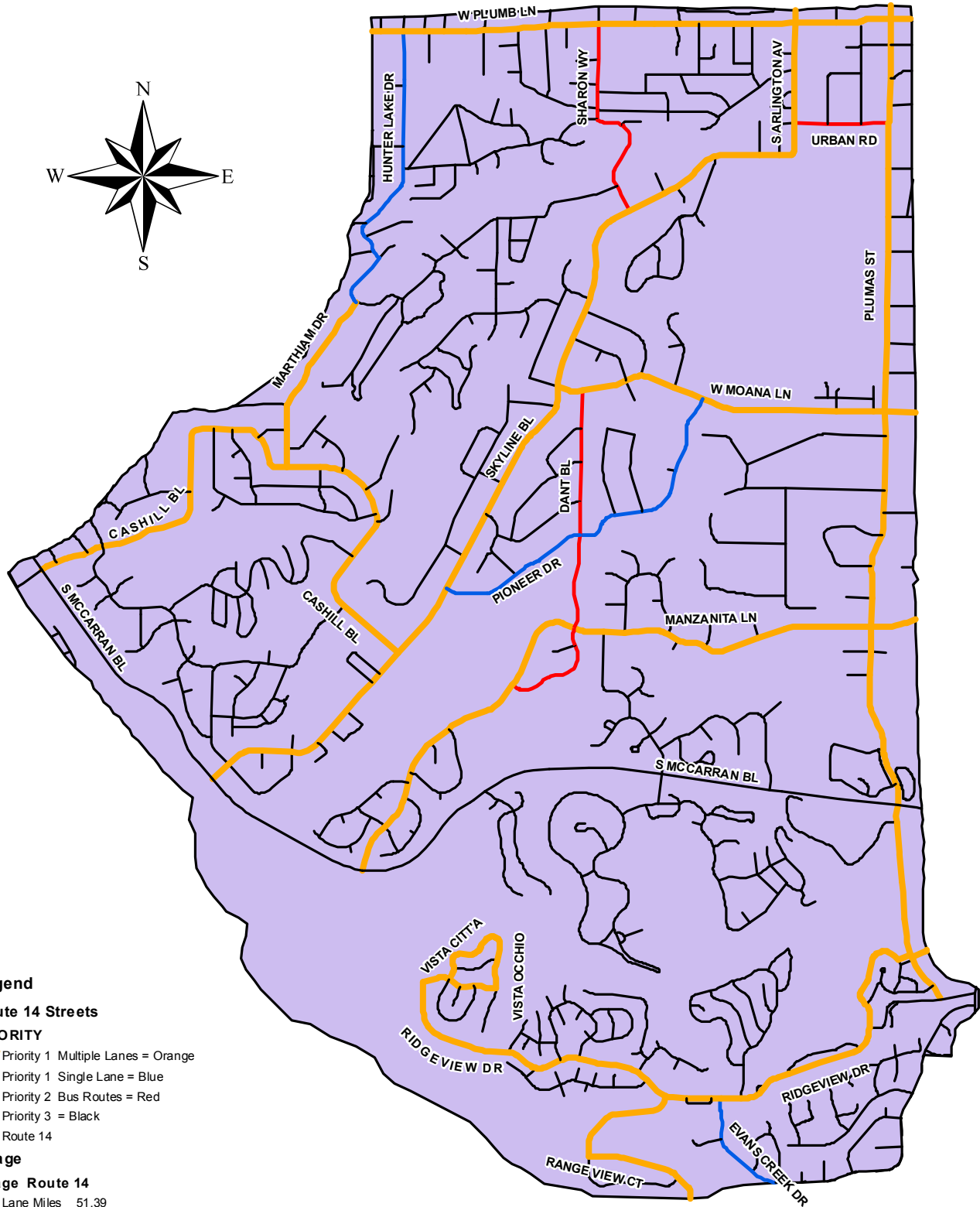
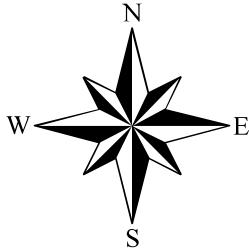
##### Milage Route 13

|            |       |
|------------|-------|
| Lane Miles | 30.56 |
| Lane Miles | 14.7  |
| Lane Miles | 3.2   |
| Total      | 48.46 |



All priority 1 streets get brine when conditions permit.

# Route 14



## Legend

### Route 14 Streets

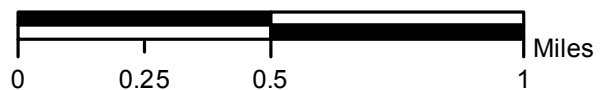
#### PRIORITY

- Priority 1 Multiple Lanes = Orange
- Priority 1 Single Lane = Blue
- Priority 2 Bus Routes = Red
- Priority 3 = Black
- Route 14

#### Milage

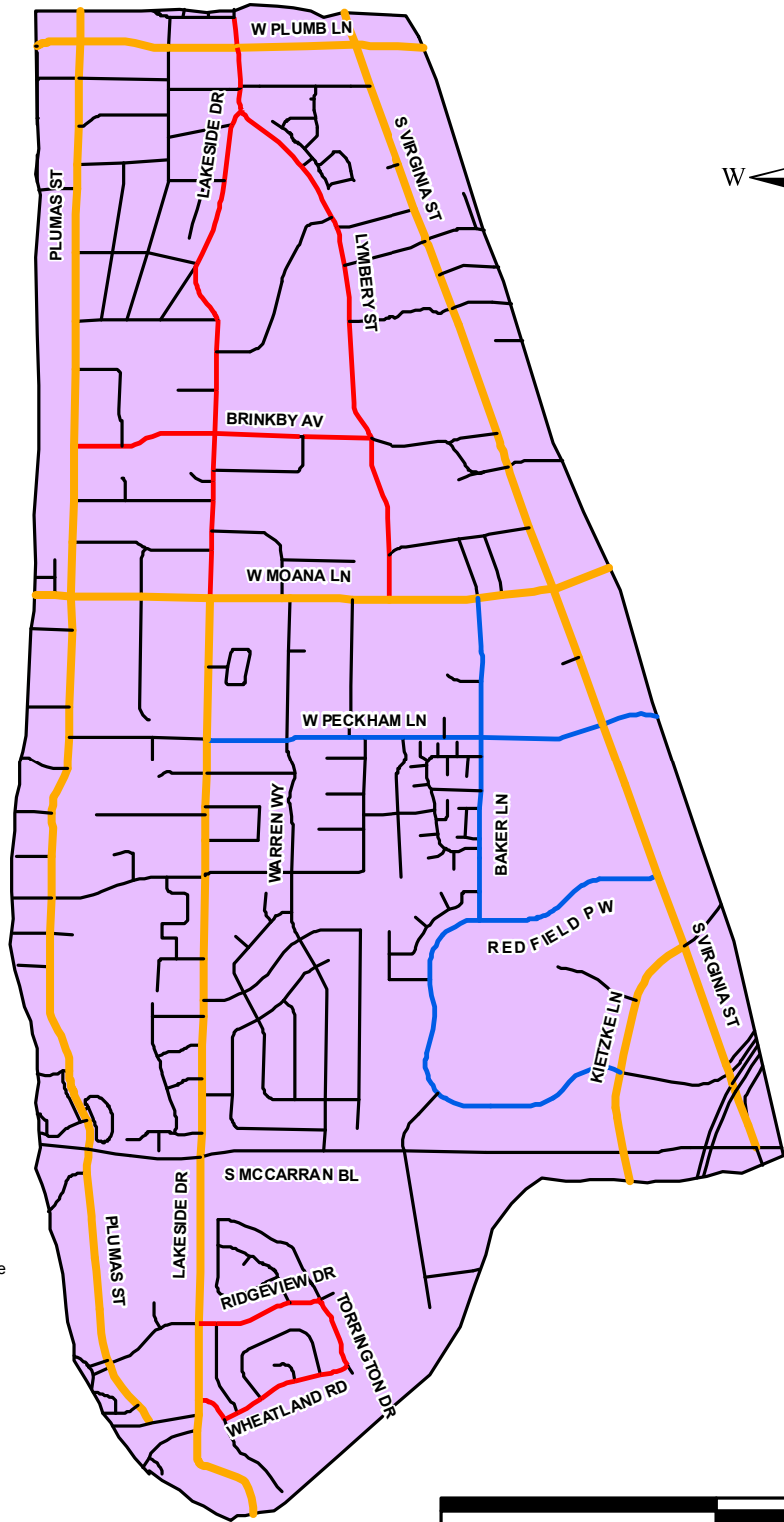
##### Milage Route 14

|  |            |       |
|--|------------|-------|
|  | Lane Miles | 51.39 |
|  | Lane Miles | 7.88  |
|  | Lane Miles | 6.38  |
|  | Total      | 65.64 |



All priority 1 streets get brine when conditions permit.

# Route 15



## Legend

### Route 15 Streets

#### PRIORITY

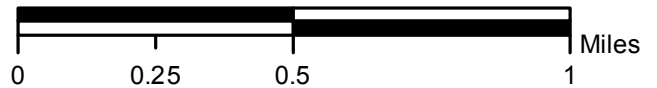
- Priority 1 Multiple Lanes = Orange
- Priority 1 Single Lane = Blue
- Priority 2 Bus Routes = Red
- Priority 3 = Black
- Route 15

#### Milage

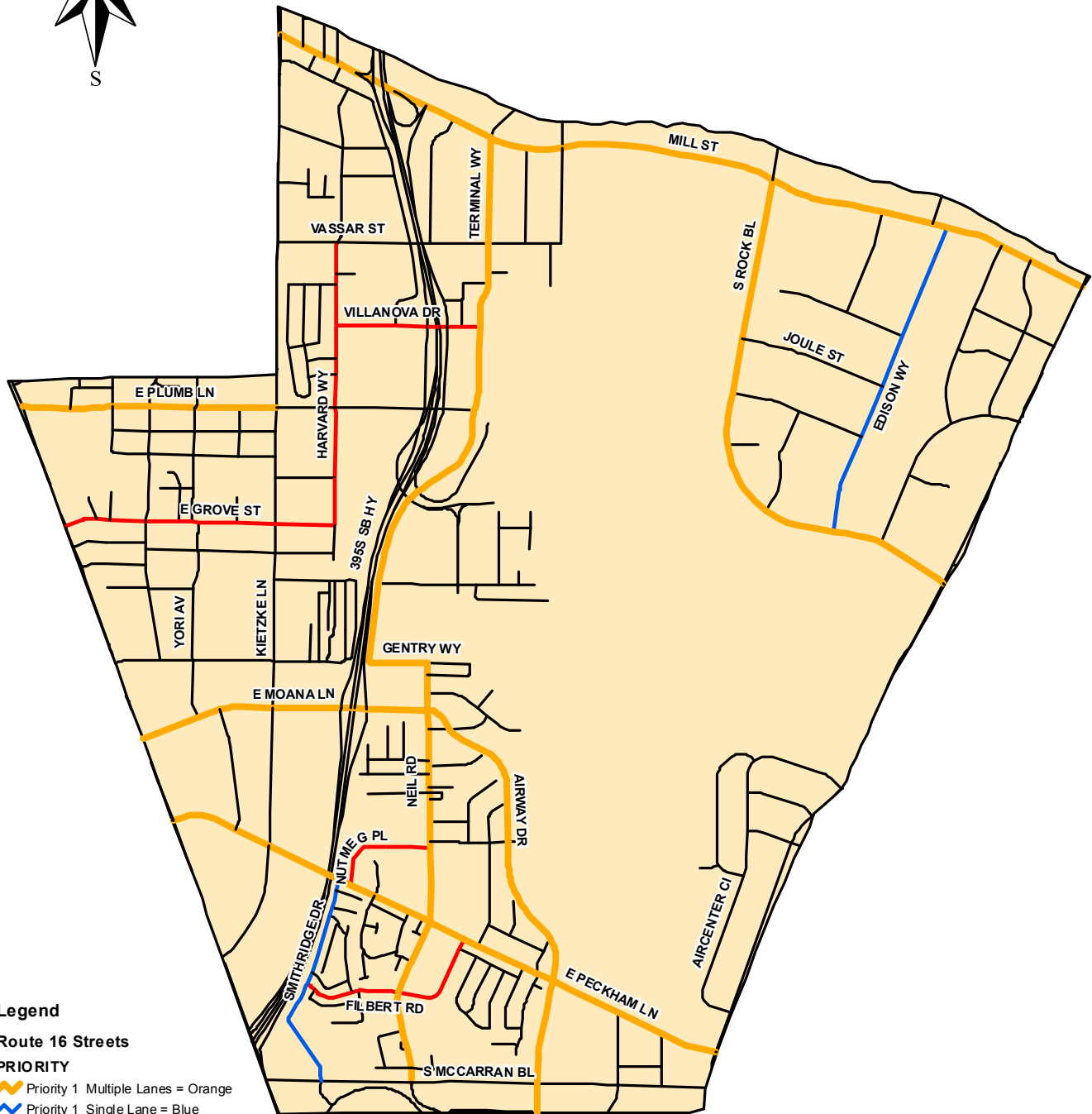
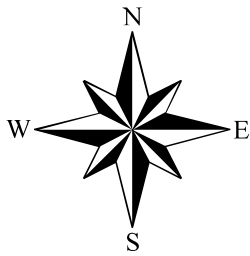
##### Milage Route 15

|            |       |
|------------|-------|
| Lane Miles | 36.34 |
| Lane Miles | 7.6   |
| Lane Miles | 11.3  |
| Total      | 55.24 |

All priority 1 streets get brine when conditions permit.



# Route 16



## Legend

### Route 16 Streets

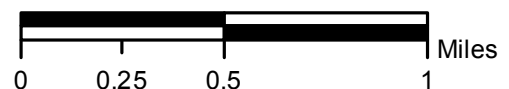
#### PRIORITY

- Priority 1 Multiple Lanes = Orange
- Priority 1 Single Lane = Blue
- Priority 2 Bus Routes = Red
- Priority 3 = Black
- Route 16

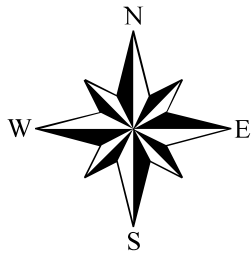
#### Milage

##### Milage Route 16

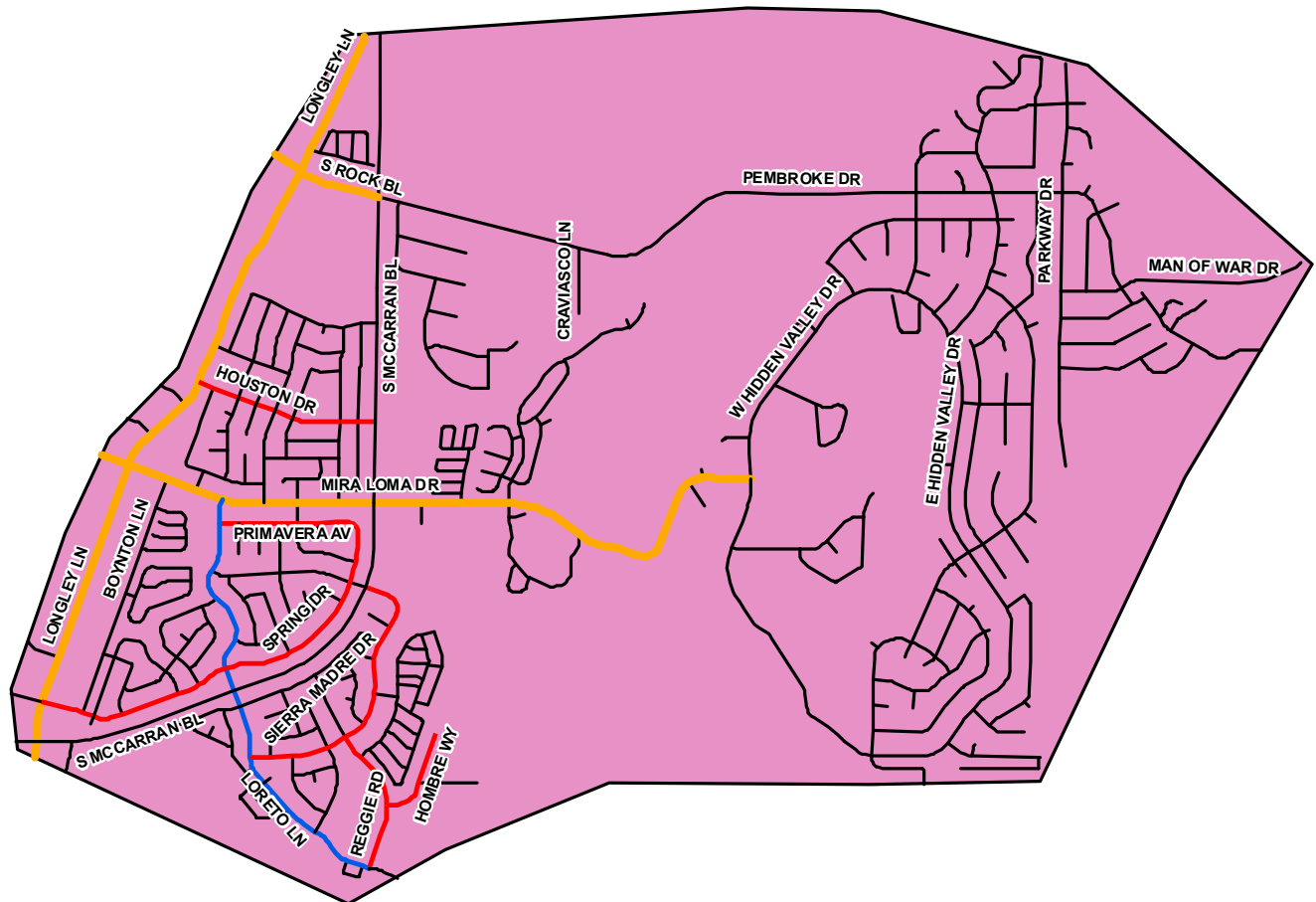
|  |            |       |
|--|------------|-------|
|  | Lane Miles | 49.47 |
|  | Lane Miles | 8.7   |
|  | Lane Miles | 8.8   |
|  | Total      | 66.97 |



All priority 1 streets get brine when conditions permit.








# Route 17



## Legend





### Route 17 Streets

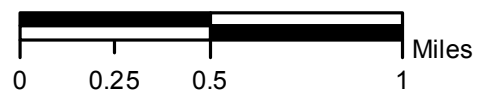
#### PRIORITY

-  Priority 1 Multiple Lanes = Orange
-  Priority 1 Single Lane = Blue
-  Priority 2 Bus Routes = Red
-  Priority 3 = Black
-  Route 17

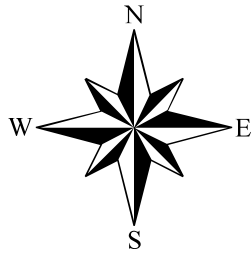
#### Milage

##### Milage Route 17

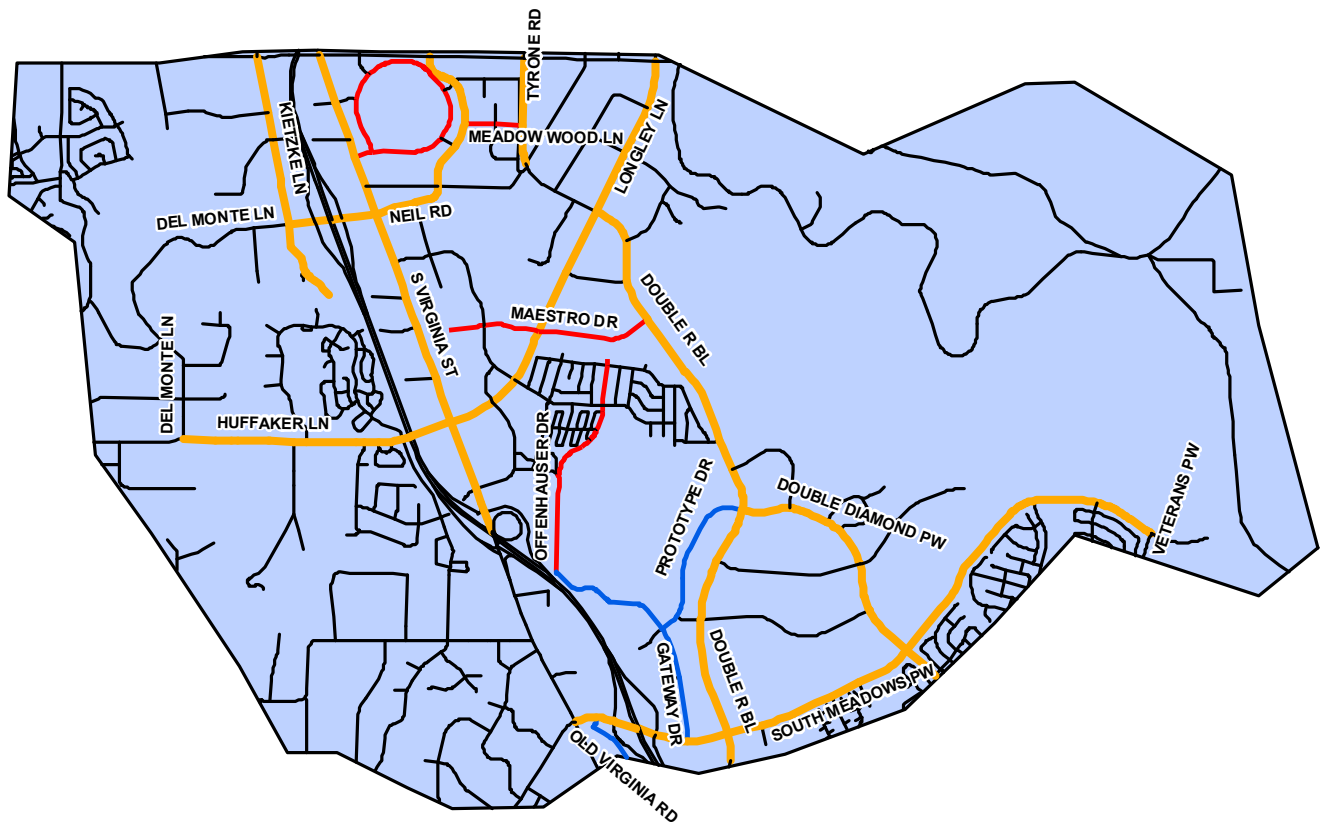
|                                                                                     |            |       |
|-------------------------------------------------------------------------------------|------------|-------|
|  | Lane Miles | 22.00 |
|  | Lane Miles | 3.7   |
|  | Lane Miles | 7.0   |
|  | Total      | 32.70 |



All priority 1 streets get brine when conditions permit.








# Route 18



## Legend



### Route 18 Streets

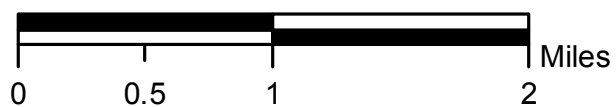
#### PRIORITY

-  Priority 1 Multiple Lanes = Orange
-  Priority 1 Single Lane = Blue
-  Priority 2 Bus Routes = Red
-  Priority 3 = Black
-  Route 18

#### Milage

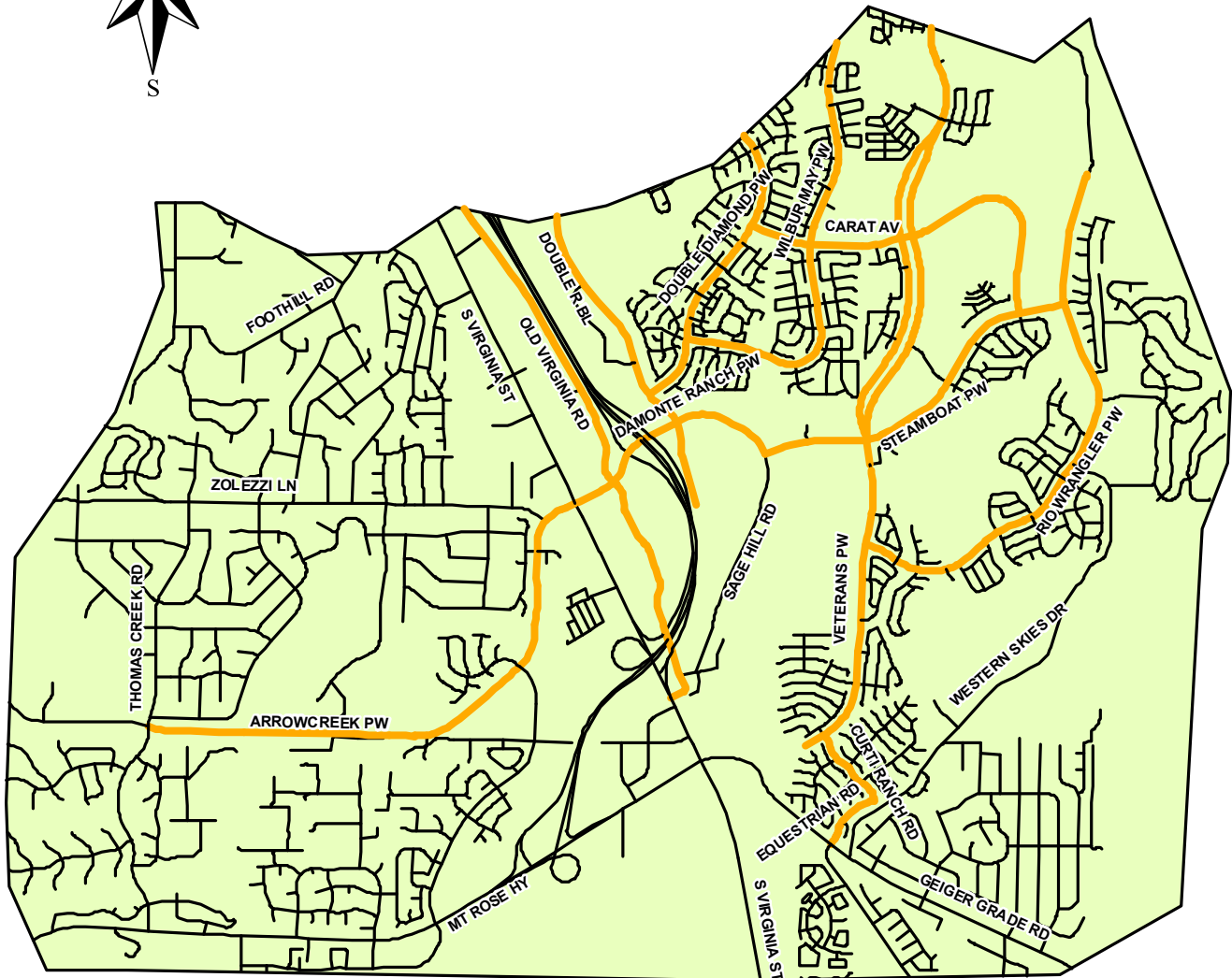
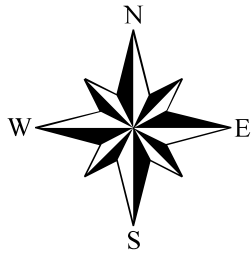
##### Milage Route 18

|                                                                                                |       |
|------------------------------------------------------------------------------------------------|-------|
|  Lane Miles | 48.21 |
|  Lane Miles | 3.86  |
|  Lane Miles | 8.71  |
|  Total      | 60.78 |



All priority 1 streets get brine when conditions permit.






# Route 19



## Legend


### Route 19 Streets

#### PRIORITY

-  Priority 1 Multiple Lanes = Orange
-  Priority 1 Single Lane = Blue
-  Priority 2 Bus Routes = Red
-  Priority 3 = Black
-  Route 19

#### Milage

##### Milage Route 19

|                                                                                                |       |
|------------------------------------------------------------------------------------------------|-------|
|  Lane Miles | 84.28 |
|  Lane Miles | 0.00  |
|  Lane Miles | 0.00  |
|  Total      | 84.28 |



All priority 1 streets get brine when conditions permit.



| Route 1                                                                                                                                   | Route 2                                                                                                              | Route 3                                                                                                                          | Route 4                                             | Route 5                                                                                                                                                                                                                     | Route 6                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Priority 1 Multiple Lanes</b><br>Copperfield<br>Industry<br>Lear<br>Moya<br>Mt Anderson<br>Mt Vida<br>Red Rock<br>Silver Lake<br>Stead | <b>Priority 1 Multiple Lanes</b><br>Lear<br>Military<br>Silver Lake<br>Sky Vista<br>Stead<br>Virginia<br>Vista Knoll | <b>Priority 1 Multiple Lanes</b><br>Dandini<br>Moraine<br>Parr<br>Talus<br>Virginia                                              | <b>Priority 1 Multiple Lanes</b><br>Boomtown Garson | <b>Priority 1 Multiple Lanes</b><br>Del Webb<br>Evening Rock<br>Rainbridge Pkwy<br>Sommerset<br>Sommerset Ridge                                                                                                             | <b>Priority 1 Multiple Lanes</b><br>7th<br>Avenida de Landa<br>Beaumont<br>Kings Row<br>Las Brisas<br>Mae Anne<br>Robb<br>Royal Sage<br>Sharlands<br>Sommerset<br>Sunline                |
| <b>Priority 1 Single Lane</b><br>Bagpipe<br>Bravo<br>Echo<br>Mt Babcock<br>Mt Limbo                                                       | <b>Priority 1 Single Lane</b><br>Silver Sky                                                                          | <b>Priority 1 Single Lane</b><br>Hoge<br>Spectrum                                                                                | <b>Priority 1 Single Lane</b><br>n/a                | <b>Priority 1 Single Lane</b><br>n/a                                                                                                                                                                                        | <b>Priority 1 Single Lane</b><br>Ariel<br>Brookdale<br>Coit<br>Glen Eagles<br>Grand Summit<br>Rainbow Ridge<br>Roxbury<br>Sierra Highlands<br>Simons<br>La Salle Heights<br>Provence Ci. |
| <b>Priority 2</b><br>Mariner Cove<br>Mt Bismark<br>Peppermint<br>Red Baron<br>Silver Shores                                               | <b>Priority 2</b><br>Autum<br>Kernite                                                                                | <b>Priority 2</b><br>Beckworth<br>Colony<br>Lancaster<br>Omaha<br>Reservation<br>Sagehen<br>Western<br>Yorkshire<br>Opal Station | <b>Priority 2</b><br>n/a                            | <b>Priority 2</b><br>Ashland Bluff<br>Autumn Valley<br>Bay Meadows<br>Cabin Creek Trail<br>Crickewood<br>Evergreen Ridge<br>Hidden Park<br>Meridian Ranch<br>Mt Pleasant<br>Orchard Park Trail<br>Trail Creek<br>Chalkstone | <b>Priority 2</b><br>Ambassador<br>Backer Crosswater<br>Heatherwood<br>Stone Valley<br>Tappan<br>Valley Wood<br>Walnut Creek<br>Villa Verde                                              |

| Route 7                                                                                  | Route 8                                                                                                                                                                                     | Route 9                                                                                                                        | Route 10                                                                                                                                                   | Route 11                                                                                                                                       | Route 12                                                                                          | Route 13                                                                                              |
|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| <b>Priority 1 Multiple Lanes</b><br>7th<br>Keystone<br>Kings Row<br>Sierra               | <b>Priority 1 Multiple Lanes</b><br>Clearacre<br>Sutoro<br>Virginia<br>Wedekind                                                                                                             | <b>Priority 1 Multiple Lanes</b><br>2nd<br>4th<br>6th<br>9th<br>Kirman<br>Kuenzli<br>Mill<br>Oddie<br>Plumb<br>Sutoro<br>Wells | <b>Priority 1 Multiple Lanes</b><br>4th<br>6th<br>Arlington<br>California<br>Keystone<br>Liberty<br>Mill<br>Plumas<br>Plumb<br>Sierra<br>Virginia<br>Wells | <b>Priority 1 Multiple Lanes</b><br>2nd<br>4th<br>5th<br>Arlington<br>California<br>Dickerson<br>Keystone<br>Mayberry<br>Plumb<br>Summit Ridge | <b>Priority 1 Multiple Lanes</b><br>Anselmo<br>W. 4 <sup>th</sup>                                 | <b>Priority 1 Multiple Lanes</b><br>Aquila<br>Brighton<br>Cashill<br>Caughlin<br>Plumb<br>Southampton |
| <b>Priority 1 Single Lane</b><br>Putnam<br>Ralston<br>Stoker<br>Washington<br>Wyoming    | <b>Priority 1 Single Lane</b><br>Clear Valley<br>Comstock<br>Crystal<br>Evans<br>Maynard<br>Northtowne<br>Scottsdale<br>Socrates<br>Timber<br>Valley<br>Sienna Park<br>N University Park Lp | <b>Priority 1 Single Lane</b><br>Locust<br>Montello<br>Ryland<br>Taylor<br>Vassar                                              | <b>Priority 1 Single Lane</b><br>2nd<br>Center<br>Holcomb<br>Kuenzli<br>Lake                                                                               | <b>Priority 1 Single Lane</b><br>Hunter Lake<br>Idlewild<br>Riverside<br>Sky Mountain<br>Sky Valley<br>Stoker                                  | <b>Priority 1 Single Lane</b><br>Aspen<br>Mountain Gate<br>River Flow<br>River Front<br>White Fir | <b>Priority 1 Single Lane</b><br>Ash Fork<br>Greensburg<br>Markridge<br>Meridian<br>Susileen<br>Yuma  |
| <b>Priority 2</b><br>12th<br>Coleman<br>Elmcrest<br>Everett<br>Ives<br>Stoker<br>Wyoming | <b>Priority 2</b><br>Cannan<br>Sadlier<br>Selmi<br>Silverada<br>Winston<br>Golfview                                                                                                         | <b>Priority 2</b><br>Bresson<br>Carville<br>Casazza<br>Manhattan<br>Yori                                                       | <b>Priority 2</b><br>Monroe<br>Ralston<br>Vine<br>Walker<br>Washington<br>St. Lawrence                                                                     | <b>Priority 2</b><br>Booth<br>Foster<br>Keele<br>Marsh<br>Mt Rose<br>Sharon                                                                    | <b>Priority 2</b><br>Ambrose<br>Edgewater<br>Riverhaven                                           | <b>Priority 2</b><br>Village Green                                                                    |

| <b>Route 14</b>                                                                                                                        | <b>Route 15</b>                                                                                   | <b>Route 16</b>                                                                                             | <b>Route 17</b>                                                                         | <b>Route 18</b>                                                                                                                               | <b>Route 19</b>                                                                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Priority 1 Multiple Lanes</b><br>Cashill<br>Manzanita<br>Marthiam<br>Moana<br>Plumas<br>Plumb<br>Range View<br>Ridgeview<br>Skyline | <b>Priority 1 Multiple Lanes</b><br>Lakeside<br>Manzanita<br>Moana<br>Plumas<br>Plumb<br>Virginia | <b>Priority 1 Multiple Lanes</b><br>Airway<br>Mill<br>Moana<br>Neil<br>Peckham<br>Plumb<br>Rock<br>Terminal | <b>Priority 1 Multiple Lanes</b><br>Longley<br>Mira Loma                                | <b>Priority 1 Multiple Lanes</b><br>Double R<br>Double Diamond<br>Huffaker<br>Kiekze<br>Longley<br>Moana<br>Neil<br>South Meadows<br>Virginia | <b>Priority 1 Multiple Lanes</b><br>Arrowcreek<br>Carat<br>Curti Ranch<br>Damonte Ranch<br>Double R<br>Equestrian<br>Steamboat<br>Veterans<br>Wilbur May |
| <b>Priority 1 Single Lane</b><br>Evans Creek<br>Pioneer                                                                                | <b>Priority 1 Single Lane</b><br>Baker<br>Peckham<br>Redfield                                     | <b>Priority 1 Single Lane</b><br>Edison<br>Smithridge<br>Vassar                                             | <b>Priority 1 Single Lane</b><br>Rio Pocco                                              | <b>Priority 1 Single Lane</b><br>Delucchi<br>Gateway<br>Home Gardens<br>Prototype                                                             | <b>Priority 1 Single Lane</b><br>Old Virginia                                                                                                            |
| <b>Priority 2</b><br>Dant<br>Urban                                                                                                     | <b>Priority 2</b><br>Berrum<br>Brinkby<br>Lynberry<br>Ridgeview<br>Wheatland                      | <b>Priority 2</b><br>Colony<br>Filbert<br>Grove<br>Harvard<br>Nutmeg<br>Reservation<br>Villanova            | <b>Priority 2</b><br>Hombre<br>Houston<br>Primavera<br>Reggie<br>Sierra Madre<br>Spring | <b>Priority 2</b><br>Meadowwood Mall<br>Maestro<br>Offenhauser                                                                                | <b>Priority 2</b><br>n/a                                                                                                                                 |

